

## CLAIMS:

1. A wear-indicating filament for use in a brush, comprising:
  - a central axis;
  - a core extending along the central axis;
  - said core being covered by a layer having a pre-determined resistance to wear;
  - 5 - said layer wearing away over a pre-determined period of use dependent on its resistance to wear and exposing at least a part of the core after said period, characterized in that the layer comprises a material which absorbs relatively little water and the core comprises, seen in a cross-section, at least two segments in an asymmetrical arrangement along the central axis of the filament, which segments have a mutually different absorption of
  - 10 water and show a difference in expansion when the layer has worn away and the core is exposed to water.
2. A wear-indicating filament as claimed in claim 1, characterized in that a first segment comprises a polyamide chosen from a group comprising PA-6, PA-6.6.
- 15 3. A wear-indicating filament as claimed in claim 1, characterized in that a second segment comprises a polyamide chosen from a group comprising PA-6.10, PA-6.11, PA-6.12.
- 20 4. A wear-indicating filament as claimed in claim 1, characterized in that the layer comprises a material chosen from a group of polyester, polyethylene and polypropylene.
- 25 5. A wear-indicating filament as claimed in claim 1, characterized in that the layer is formed by two layer parts on an outer surface of the core having mutually differing wear resistances, and the core comprises a first and a second segment of the same material, which segments have a mutually different absorption of water and show a difference in expansion when a layer part has worn away and the core is exposed to water.

6. A wear-indicating filament as claimed in any one of the preceding claims, characterized in that the layer and at least one of the segments have mutually different colors.

7. A brush comprising a plurality of wear-indicating filaments, comprising:

- 5 - a longitudinally extending core of a first material;
- said core being covered by a layer of a second material having a predetermined resistance to wear;
- said layer wearing off from the core over a pre-determined period of use dependent on the resistance to wear and exposing at least a part of the core after said period,
- 10 characterized in that the wear-indicating filaments comprise filaments according to any of the preceding claims.

8. A brush as claimed in claim 9, characterized in that said brush comprises a brush for a personal care appliance chosen from a group of toothbrushes and cosmetic  
15 brushes, or a brush chosen from a group of floor care brushes, paint brushes, and industrial brushes.